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(12) **United States Patent**
Helenek et al.(10) **Patent No.:** **US 8,431,549 B2**
(45) **Date of Patent:** ***Apr. 30, 2013**(54) **METHODS AND COMPOSITIONS FOR ADMINISTRATION OF IRON**(75) Inventors: **Mary Jane Helenek**, Brookville, NY (US); **Marc L. Tokars**, Douglassville, PA (US); **Richard P. Lawrence**, Calverton, NY (US)(73) Assignee: **Luitpold Pharmaceuticals, Inc.**, Shirley, NY (US)(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 47 days.
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See application file for complete search history.

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ABSTRACT

The present invention generally relates to treatment of iron-related conditions with iron carbohydrate complexes. One aspect of the invention is a method of treatment of iron-related conditions with a single unit dosage of at least about 0.6 grams of elemental iron via an iron carbohydrate complex. The method generally employs iron carbohydrate complexes with nearly neutral pH, physiological osmolality, and stable and non-immunogenic carbohydrate components so as to rapidly administer high single unit doses of iron intravenously to patients in need thereof.

23 Claims, 2 Drawing Sheets